then, giving this organism the name of micrococcus rheumatism, but be the cause what it may, my object in this paper is concerned only with rheumatism in relation to disease of the throat, and any one either in general or special practice, will recognize the fact that rheumatism occurs most frequently in the first half of life, as does tonsilitis, that rheumatism occurs more in the male than the female, so does tonsilitis, that rheumatism occurs most in the winter and spring months, so do affections of the throat—these are general statements, now let us see what relations they bear—one to the other.

In reviewing a report covering thirteen years of the Osler clinic, I select and present some of the important facts, they report that rheumatism make up 2 per cent of the cases admitted to the hospital, while Montreal claims 3.8 per cent and the figures from London 3.5 per cent to 7 per cent—the relation of white to colored patients is as 4.8 to 1. I might also recall to your minds that the negro is very much less troubled with rheumatism and seldom does he have tonsilitis. Now the question is, what relation do rheumatism and tonsilitis bear—one to the other.

Going back over my case records, I find that in the history of a great number of cases of tonsilitis and some pharyngitis give accurate histories of previous attacks of rheumatism, and investigations into the reports of others, particularly from the Osler clinic as well as from London, I find at least 10 per cent and in some instances, even much higher per cent, showing unmistakable evidence of rheumatism

In my own cases, I do not mean that the patient admitting his having had rheumatism is sufficient for me to class him as a rheumatic, for you will find few patients but what think they have rheumatism, but I class such cases as such, only after extensive inquiry do I class them as rheumatics.

This one fact is evident: that in cases of simple inflammations of the tonsilar tissue, without pus formation, which continues for more than four or five days under ordinary treatment, you will almost without exception, find positive evidence of a rheumatic taint. Also in the cases of simple pharyngitis, cases in which only a mild congestion and very little thickening of tissue occurs, but painful swallowing, cases when the oft-prescribed Tr. Ferri Chlor. and Pot. Chlorate is used as well as the various antiseptic and astringent remedies but give no results, you will find yield very readily under the usual rheumatic remedies, whether it be the lithias, the salicylates or the newer snythetic remedies, separately or in combination. I shall not attempt to cite cases in detail but state in general, that very frequently, cases come to the specialist of which the history is much like the following:

Has frequent attacks of sore throat, tonsils more or less swollen, pain in the throat, difficult to accurately locate, but on inspection, the general characteristics of the throat do not compare with the amount of discomfort it is causing the patient, who, often complains of a smarting, burning pain in the throat. Sometimes the patient's main complaint is cough without a visible cause, afttimes cough is quite

severe on exposure to even a slight degree of cold, and invariably in questioning these patients closely and going back into their previous history, you will find that patient has suffered from one or more well defined attacks of rheumatism and in all cases cough sedatives, local applications of whatsoever kind, except when used in the acute stage, are all found wanting, yet these cases yield to your anti-rheumatism remedies.

I recall one case in particular in which the patient, a lady, whose main complaint was a persistent cough, so severe at times that it would end up in a spell of vomiting and was later followed by considerable loss of flesh, but on inspection of the throat, there was only a mild congestion, the vocal cords slightly reddened, she had gone the rounds of cough sedatives, local applications and various modes of attempting to control the cough but all of little benefit. The patient gave a clear history of previous attacks of rheumatism and one attack immediately preceding the beginning of the cough, which had existed for more than three months, but under no other remedies than 12½ gr. doses of aceto-salicylic acid, the cough ceased within 36 hours and has not yet recurred.

I have not mentioned this subject with the idea of bringing you something new or in any particular original, but a subject of interest to the man in general practice, as well as to the one who confines his work to the region here mentioned. A class of cases which yield very poorly to the routine treatment of sprays and gargles, but react most readily to those medicines which eliminate and counteract the rheumatic poison and is a subject that should be discussed as much by the family physician as the man in special work. I have avoided fine technicalities and detail of cases, desiring rather to present broad general statements, being a brief resume of an every day condition we all meet with in our rounds of practice.

## SUTURE OF THE AORTA.\*

By H. E. CASTLE, M. D., San Francisco.

Through the courtesy of our President, Dr. Ryfkogel and I are permitted to present this little dog that has had his aorta sutured. This operation was done one and one-half months ago and there has been no paralysis up to this time. dog has always been very lively. The object of presenting him now is because on a subsequent day the aorta will be removed and sectioned and then we shall show you the histological changes under the microscope. The operation in itself is not of much importance. We were preparing our abdominal technic for vascular surgery so that we could go on with the transplantation of organs. There is some difference between working in the neck of a dog and in the abdomen on account of the field of operation being so crowded in the latter, and the many vessels that come off the aorta in the lumbar region make it rather difficult. In this case there was no ligation of any of the arteries. Instead

<sup>\*</sup>Demonstration before the San Francisco County Medical Society, May 11, 1909.

of cutting the arteries off, which would be the common procedure, we simply pulled them back and clamped them in the same clamp which held the vessel that we were suturing. This procedure left no anemia of the cord which is the cause of paralysis in these operations. Our technic is similar to that of Drs. Carrel, Watts and Guthries; that is, three guy sutures and a circular continuous suture around the vessel. In the Carrel method the circular suture is tied to each guy suture as it is passed. We carry the same suture around the entire vessel. We have been asked if this causes the purse string effect. It does not. The silk will not slide enough to cause constriction. We do not use rubber gloves because the vaseline on the sutures and needles makes them difficult to handle. The needles are very likely to puncture a glove and cause infection, so we use Professor Murphy's gutta percha solution. We have been asked how to keep the sutures. They must be sterilized in vaseline, and as we had a great deal of difficulty in our early work in getting the proper temperature for sterilizing and yet not burning them, we now do it in the following manner: We thread the needles and sew them into a piece of bandage and immerse this in a wide mouthed bottle, pour the bottle full of melted vaseline, cover securely, and put the bottle into an autoclave. After removal from the autoclave the bottle is sealed with wax. At the time of operation the bottle is washed off with pure lysol and opened by sterile hands. We have had no trouble whatsoever with infection.

## REVERSE PERISTALSIS.\*

By REXWALD BROWN, M. D., Santa Barbara, Cal.

Having features altogether out of the usual clinical run leads me to present the following case history: On May 27, 1907, I did a posterior drainage operation with the Murphy button to relieve the symptoms dependent on carcinoma of the pylorus in a gentleman of sixty-five. The stomach was found of about normal size. The immediate convalescence was uneventful—patient was home in two weeks and was eating and enjoying solid food in the third week. Free easy bowel movements occurred daily.

On June 26, one month after the operation, having been out of doors and very comfortable all of the morning, patient had a light luncheon, immediately followed by abdominal pain severe enough to send him to bed. He felt nauseated, and vomited a small amount of greenish-yellow fluid. Shortly after he had a large free evacuation.

During the afternoon patient was not especially uncomfortable; had some pain, however. Toward evening the nurse noted that the abdomen was a trifle distended and hard. She thought it wise to give an enema to bring away the gas which she considered present. Accordingly she gave one and one-half quarts of a saline solution—three large teaspoonfuls of salt to a quart of water—which failed to relieve. Immediately the abdomen progressively increased in size. Becoming alarmed, the nurse gave another quart and one-half of saline enema. This, too, failed to relieve, and the abdomen attained still

greater dimensions. I was sent for and before my arrival patient vomited, as the nurse said, volumes of fluid of a very salty taste and containing fecal matter. As I reached the bedside patient again vomited at least two quarts of the same material. In all there must have been some four or five quarts of vomitus.

Examination revealed a patient practically in collapse, with a rapid stringy pulse, shallow respirations, and an abdomen which was barrel shape, enormously and uniformly distended from pelvis to chest. It actually appeared that the abdominal wall must burst from the extreme tension. Eserin 1/50 and atropin 1/60 hypodermically was given at once. Patient was turned onto his left side. No more vomiting occurred, abdomen rapidly fell to its normal proportions and pulse dropped to 90. By midnight patient was asleep and had a fairly easy night. The next afternoon by enema there was a large loose movement in which the button came away.

Still open for analysis is the interesting field of acute dilatation of the stomach, under which caption I placed the above case at the time, its occurrence following hard upon my having read an article on the subject by Connor. Clinical reports of the condition are not numerous, nor do they describe a uniform picture—some cases present symptoms absent in others—and the literature can stand reports of individual instances of the phenomenon. Some feature or features common to any two or more cases may be the key to the etiological factor or factors responsible for the stomach dilatation.

Compression of the duodenum by the root of the mesentery as found at many autopsies does not adequately explain, and cause is being sought in disturbance of the innervation of the stomach, either in the plexuses, along the gastric nerve trunks or their centers in the brain or cord.

The above case—if acute dilatation it were—is noteworthy because, 1st, it followed an operation on the stomach—of 217 cases reported, only four followed stomach surgery; 2d, to my knowledge, the condition has not been mentioned with reference to the use of the Murphy button—the button may have had nothing to do with it; 3d, onset four weeks after operation—usually occurs in the first two or three days; 4th, the rapid evolution and devolution; 5th, complete recovery—75 per cent of cases die; and 6th, a stomach tube recommended by all writers on the subject, as the most efficient treatment; was not used.

The topic of this paper, however, is not acute dilatation of the stomach.

Attention is therefore directed to the vomitus which occurred in this case. Though anti-peristalsis is normal in the large bowel, it is altogether denied by some observers that there can be a reversal of peristalsis throughout the intestinal length. Other observers, clinicians and experimenters claim that anti-peristalsis does occur. In support of this affirmative contention is the nature of the vomitus being considered. A great amount of emesis was thrown

<sup>\*</sup> Read before the Thirty-ninth Annual Meeting of the State Society, San Jose, April, 1909.